

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in this application.

**Listing of Claims:**

Claims 1-33 (Cancelled)

34. (Currently Amended) An isolated human (SEQ ID NO: 14), mouse (SEQ ID NO: 16) or *D. melanogaster* (SEQ ID NO: 18) presenilin associated membrane protein (PAMP), ~~or a function conservative fragment thereof.~~

35. (Currently Amended) An isolated mutant presenilin associated membrane protein (PAMP), ~~or a fragment thereof, which is substantially homologous to~~ of human (SEQ ID NO: 14), mouse (SEQ ID NO: 16) or *D. melanogaster* (SEQ ID NO: 18) PAMP, wherein said mutant PAMP is mutated such that the mutation results in changes in A $\beta$ <sub>42</sub> peptide levels, A $\beta$ <sub>40</sub> peptide levels, or A $\beta$ <sub>42</sub>/A $\beta$ <sub>40</sub> peptide ratio.

Claim 36 (Cancelled)

37. (Currently Amended) An isolated mutant of human presenilin associated membrane protein (PAMP) (SEQ ID NO:14), ~~or a fragment thereof,~~ wherein said mutant PAMP comprises a mutation to an amino acid residue of SEQ ID NO:14 selected from the group consisting of D336, Y337, C230, and both D336 and Y337 ~~of human PAMP (SEQ ID NO:14).~~